Discovery 2015: Cloud Computing Institute
July 19-23, 2010

Location: CITRIS Building - Sutardja Dai Hall on the University of California, Berkeley campus. Room 250.

Organizers: Lawrence Berkeley National Laboratory (LBNL) and CITRIS

Participating Institutions: LBNL, UC Berkeley, UC Davis, Yahoo!, Amazon, Eucalyptus Systems, University of Virginia, Microsoft, CITRIS

Monday – Starting at 2pm

2-2:10pm Welcome – Deb Agarwal (LBNL)

2:10 - 2:40pm Cloud Computing Background – Lavanya Ramakrishnan (LBNL)

2:40pm – 3:30pm Cloud Computing Overview and results – Keith Jackson (LBNL)

3:30 - 4pm – Afternoon break – laptop setup/accounts orientation

4pm – 5 pm Applications using the cloud (UCB & LBNL)

       Porting crowdsourcing traffic monitoring and prediction to the cloud - Alex Bayen (UCB)

       Porting Supernova Codes to the Cloud - Rollin Thomas (LBNL)

Tuesday – 8am – 5pm

8am-10am - Eucalyptus tutorial – Shashi Mysore (Eucalyptus)

9:30am – 9:45am – Morning break

10:15 – 11am - Eucalyptus hands-on – Shashi Mysore (Eucalyptus)

11am – noon – Large graph algorithms – data management and parallelization – Kamesh Madduri (LBNL)

Noon – Working lunch – hands-on

1pm – 1:30pm - Storage Resource Managers: Middleware for Dynamic Storage Allocation, and Uniform Storage Access – Arie Shoshani (LBNL)

1:30pm - 2pm – FastBit Indexing – John Wu (LBNL)

2 – 2:30pm – Afternoon break

2:30pm – 3:00pm – Cloud computing on Azure: Programming Model – Jie Li (UVa)

3:00pm – 3:30pm – Dryad – Yogesh Simhan (Microsoft)

3:30pm -4pm – AMPLab - Solving the Scalability Dilemma with Algorithms, Machines and People – Michael Franklin (UCB)

4pm – 5pm –UCB Cloud computing talks

Benchmarking Alternative Architectures for Transaction Processing in the Cloud - Tim Kraska (UCB)

Dominant Resource Fairness: Fair Allocation of Resources in Datacenters - Ali Ghodsi (UCB)

Wednesday –8am – 5pm

8-10:30am – Hadoop tutorial - Viraj Bhat (Yahoo!)

10:30 – 10:45am – Morning break

10:45am - noon – Hadoop tutorial - Viraj Bhat (Yahoo!)

Noon – working lunch

Noon-2pm –Pig and other high level environments – Viraj Bhat (Yahoo!)

2 – 2:30pm – afternoon break

2:30pm - 5pm – Hadoop/Pig hands-on – Viraj Bhat (Yahoo!)

Thursday – 8am – 5pm

8am – 9:00 am – Using Azure: Experiences – Jie Li (UVa)

9am – 10am – Scalable schema-less databases – Dan Gunter (LBNL)

10 – 10: 30am – Morning break

10:30am – 11:00am – NERSC/Magellan Cloud computing– Shane Canon (LBNL/NERSC)

11am – noon – Epsilon Machines – Machine learning – Sean Whalen (UCD)

Noon – Working lunch

1 – 3pm – Hands-on exercises

3 – 3:30pm – Afternoon break

3:30 – 5pm – Hands-on exercises

Friday – 8am – 11am

8am-11am - Amazon AWS tutorial – Deepak Singh (Amazon)

9:30am-9:45am Morning break